



Proposition 50, Chapter 8
Integrated Regional Water Management Grant Program

PLANNING GRANT APPLICATION

Bay Area
Integrated Regional
Water Management Plan

Attachment 3:
Water and Wastewater Work Plan

MAY 2005

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Integrated Regional Water Management Grant Program
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**Bay Area Integrated Regional Water
Management Plan**

**Attachment 3: Water and Wastewater Work
Plan**

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Bay Area Integrated Regional Water Management Plan
Planning Grant Proposal Pursuant to Proposition 50, Chapter 8

WORK PLAN

**Water Supply/Water Quality and Wastewater/Recycled Water
Functional Areas**

Preface

San Francisco Bay Area water, wastewater, flood protection and stormwater management agencies; cities and counties represented by the Association of Bay Area Governments (ABAG); and watershed management interests represented by the California Coastal Conservancy (CCC) and non-governmental environmental organizations have signed a Letter of Mutual Understandings (LOMU) to develop a Bay Area Integrated Regional Water Management Plan (IRWMP) for the entire nine-county San Francisco Bay Area.

The LOMU calls for developing a plan that includes four functional service areas related to water management. These functional areas are (1) Water Supply and Water Quality, (2) Clean Water (Wastewater) and Recycled Water, (3) Flood Protection and Stormwater Management, and (4) Watershed Management and Habitat Protection and Restoration. Each of the functional areas is led by a technical coordinating committee (TCC) made up of representatives from agencies and organizations involved in that function. The overall IRWMP is led by a San Francisco Bay Area TCC (Bay Area TCC) comprised of representatives of all four functional areas. It is important to note that the established process for development of the IRWMP is dynamic, has evolved since the signing of the LOMU, and may continue to change, as needed, throughout the completion of the IRWMP.

While a considerable amount of time, effort and financial resources have gone into and continue to go into the preparation of the IRWMP on the part of water agencies and the California Coastal Conservancy, other entities, such as flood protection agencies and environmental organizations, are limited in their ability to finance the preparation of the plan. For this reason the Bay Area TCC has determined it to be in the best interest of the Bay Area to seek two planning grants under Chapter 8, Proposition 50. The grants will be for different purposes but will be complementary in that both will lead to completion of the IRWMP. One of the grants will be used to complete the planning within the functional areas of *Water Supply and Water Quality* and *Wastewater and Recycled Water*. The other will be used to complete the planning within the functional areas of *Watershed Management and Habitat Protection and Restoration* and *Flood Protection and Stormwater Management*. Funds from both grants will be used, then, to integrate the four functional areas into the Bay Area IRWMP.

Both grant proposals outline a work plan. The organization of the two work plans is identical to (1) facilitate the coordinated work in the Bay Area and (2) help State staff review the grant proposals. Each work plan will identify the sections or tasks that apply principally to its corresponding grant proposal, the other grant proposal or to both proposals as a joint or more intense collaborative effort.

This Work Plan is for the planning efforts to be undertaken by the entities engaged in *Water Supply and Water Quality* and *Wastewater and Recycled Water*.

For ease in reading, this proposal (i.e. the *Water Supply and Water Quality and Wastewater and Recycled Water Work Plan*) may hereinafter be referred to simply as the “*Water and Wastewater Work Plan*” and the *Watershed Management and Habitat Protection and Restoration and Flood Protection and Stormwater Management Work Plan* as the “*Watershed Management and Flood Protection Work Plan*.”

1 Background

1.1 Regional Water Management Group

This *Water and Wastewater Work Plan* being developed in concert with the *Watershed Management and Flood Protection Work Plan* for completion of an Integrated Regional Water Management Plan (IRWMP) for the San Francisco Bay Area has been prepared under the direction of the following Bay Area agencies and organizations that are involved in water management planning and related efforts for the region.

Agencies noted with an asterisk (*) are those that have responsibilities for water supply, water quality, wastewater, and/or recycled water.

- **Alameda County Public Works Agency (ACPWA).** ACPWA is responsible for maintaining the infrastructure including planning, designing, funding, and constructing the transportation and flood control facilities for unincorporated Alameda County.
- ***Alameda County Water District (ACWD).** ACWD was established in 1914 to protect the local groundwater basin, conserve the waters of Alameda Creek Watershed and develop supplemental water supplies for agricultural use. Today, the District is a retail water purveyor serving a population of over 323,000 in Southern Alameda County.
- **Association of Bay Area Governments (ABAG).** ABAG is owned and operated by the cities and counties of the San Francisco Bay Area. It was established in 1961 to protect local control, plan for the future, and promote cooperation on area wide issues. ABAG's region encompasses 100 cities and the nine counties comprising the San Francisco Bay Area including Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. More than 6 million people live in this 7,000 square mile area.
- ***Bay Area Clean Water Agencies (BACWA).** BACWA members own and operate publicly owned treatment works (POTWs) that discharge to the waters of San Francisco Bay Estuary. Together, BACWA's members serve over 6 million people in the nine county Bay Area, treating all domestic, commercial and a significant amount of industrial wastewater
- **Bay Area Stormwater Management Agencies Association (BASMAA).** The Bay Area Stormwater Management Agencies Association (BASMAA) is a consortium of the eight San Francisco Bay Area municipal storm water programs. With other participating entities BASMAA represents more than 90 agencies, including 79 cities and six counties, and the bulk of the watershed immediately surrounding San Francisco Bay. BASMAA was started in response to the National Pollutant Discharge Elimination System (NPDES) permitting program for storm water in an effort to promote regional consistency and to facilitate efficient use of public resources. The organization grew from the bottom up to focus on regional challenges and opportunities to improving the quality of storm water runoff to the San Francisco Bay and Delta.
- ***Bay Area Water Supply and Conservation Agency (BAWSCA).** BAWSCA represents the interests of 26 cities and water districts and two private utilities that purchase water on a wholesale basis from the San Francisco Public Utilities Commission (SFPUC) regional water system. BAWSCA member agencies currently serve 1.7 million people residing in Alameda, Santa Clara and San Mateo counties.
- **California State Coastal Conservancy (CCC).** The California State Coastal Conservancy, established in 1976, is a non-regulatory state agency that employs innovative approaches to

purchase, protect, restore, and enhance coastal resources, and to provide access to the shore. The Legislature created the Coastal Conservancy as a unique entity with flexible powers to serve as an intermediary among government, non-governmental organizations, citizens, and the private sector in recognition that creative approaches would be needed to preserve California's coast and San Francisco Bay lands for future generations. The San Francisco Bay Area Conservancy Program (Bay Program), administered by the Coastal Conservancy, was established in 1998 to address the natural resource and recreational goals of the nine-county Bay Area in a coordinated and comprehensive way.

- ***Contra Costa Water District (CCWD).** CCWD was formed in 1936 to provide water for irrigation and industry. Today, CCWD acts as both a retail and wholesale water distributor and currently serves approximately 500,000 people in north, central and east Contra Costa County.
- **Contra Costa County Flood Control and Water Conservation District (CCCFCWCD).** CCCFCWCD manages the flood and storm waters in Contra Costa County. The District develops and coordinates implementation of flood control plans and manages flood control facilities. The District coordinates with local, state, and federal agencies for the planning and implementation of major flood control projects. It also has authority to conserve flood waters for beneficial purposes by spreading, storing, retaining and causing them to percolate into the soil for groundwater recharge. In addition to providing flood protection, the District cooperates with cities and park districts to provide recreation opportunities within lands it manages and where such uses are compatible with the flood protection operations and improvements.
- ***East Bay Municipal Utility District (EBMUD).** Formed in 1923, EBMUD supplies high quality water and provides wastewater treatment for approximately 1.3 million people in a 321-square-mile area covering parts of Alameda and Contra Costa counties.
- ***Marin Municipal Water District (MMWD).** Formed in 1911, MMWD currently provides high quality drinking water to 185,000 people in a 147-square-mile area of Marin County.
- ***City of Napa.** The City of Napa manages local and imported water supplies to provide safe, reliable, high quality water to 81,000 residents in and around the city limits.
- **North Bay Watershed Association (NBWA).** The North Bay Watershed Association is a partnership of fifteen public agencies in Marin, Sonoma, and Napa counties dedicated to facilitating projects and activities across political boundaries to promote the stewardship of the San Pablo Bay watershed. Agencies participate in the NBWA to discuss issues of common interest, explore ways to work collaboratively on water resources projects of regional concern, and share information about projects, regulations, and technical issues.
- **The Bay Institute (TBI).** The TBI is a non-profit organization dedicated to the protection and restoration of the ecosystems of San Francisco Bay, the Sacramento-San Joaquin Delta, and the rivers, streams, and watersheds tributary to the Estuary. Since its founding in 1981, TBI has pioneered an advocacy and education approach to San Francisco Bay issues that considers not just the Bay, but the entire ecosystem related to the Bay as a single, interdependent watershed. With top-notch scientific, technical and policy staff, TBI educates the public, advocates for responsible environmental policies and improved water management. TBI was one of three environmental organizations that negotiated and signed the historic Bay-Delta Accord.
- **San Francisco Estuary Institute (SFEI).** SFEI was founded as a non-profit organization in 1994 to foster the development of the scientific understanding needed to protect and enhance the San Francisco Estuary. The Institute is governed by a Board of Directors composed of Bay Area scientists, environmentalists, regulators, local governments, and industries. SFEI fills the niche between environmental science and environmental management and policy for the San Francisco Estuary and its watershed. Its bylaws prohibit it from advocating management or policy solutions.

Institute staff conducts science studies, synthesize data and information, and collaborate with other scientists to provide a holistic integration of information from many disciplines that supports management activities or demonstrates the potential implications of different management scenarios to environmental management agencies and other stakeholders.

- **San Francisco Estuary Project (SFEP).** SFEP is a joint federal/state/local partnership established in 1987 under the Clean Water Act's Section 320: National Estuary Program. It is a cooperative effort to promote effective management of the Bay-Delta Estuary and to restore water quality and natural resources while maintaining the region's economic vitality. The SFEP's purpose is to oversee and track the implementation of the Comprehensive Conservation and Management Plan (CCMP) for the San Francisco Estuary. The San Francisco Bay Regional Water Quality Control Board is the lead agency for carrying out the CCMP.
- ***San Francisco Public Utilities Commission (SFPUC).** SFPUC owns and operates a regional water system that delivers water to its 28 wholesale customers (1.7 million residents of Santa Clara, Alameda and San Mateo Counties), and its retail customers (775,000 residents of San Francisco). The SFPUC also provides wastewater service and municipal power to the residents of San Francisco.
- **San Mateo County Flood Control District (SMCFCD).** The SMCFCD is a countywide Special District with management responsibility over the flood control facilities of the county.
- **Santa Clara Basin Watershed Management Initiative (WMI).** The Santa Clara Basin Watershed Management Initiative was formed in 1996 as a collaborative effort of representatives from Santa Clara County and South Bay businesses and industrial sectors; professional and trade organizations; civic, environmental, resource conservation, and agricultural groups; regional and local public agencies; and the general public. The WMI addresses issues in water rights and water supply reliability; flood management; regulatory compliance; land use and public awareness and involvement.
- ***Santa Clara Valley Water District (SCVWD).** SCVWD manages wholesale drinking water resources for Santa Clara County and provides flood protection and stewardship for the county's vast watersheds including its reservoirs, groundwater basins and over 700 miles of streams. The District encompasses all of the county's 1,300 square miles and serves the area's 15 cities, 1.7 million residents, and more than 200,000 commuters.
- ***Solano County Water Agency (Solano CWA).** Solano CWA provides water supply and flood control activities for the cities and irrigation districts in Solano County and parts of Yolo County. Solano CWA delivers untreated water to its wholesale customers who represent over 400,000 residents.
- ***Sonoma County Water Agency (Sonoma CWA).** Created in 1949, Sonoma CWA is a water wholesaler that provides drinking water supplies to approximately 570,000 residents of Sonoma and Marin Counties. Sonoma CWA also provides sanitation and flood control services to the residents of Sonoma County.
- ***Zone 7 Water Agency (Zone 7).** Zone 7 was formed in 1957 to manage the local groundwater basin, and to provide flood protection and water supplies for the Livermore-Amador Valley. Zone 7 currently provides water supplies to approximately 190,000 residents within the cities of Dublin, Livermore, and Pleasanton and provides flood protection within the Livermore-Amador Valley, which includes the unincorporated area of East Alameda County.

Zone 7 Water Agency is submitting this application for the IRWMP Planning Grant on behalf of the agencies and organizations identified with an asterisk (*) above. Water management agency's service

area boundaries are shown in Figure 1. Most of these agencies and organizations have signed a Letter of Mutual Understanding (LOMU) proposing to develop an IRWMP. The LOMU, attached to this application as Attachment 2of4 (Att3_PG_WorkPlan_2of4), established the following goals for development of the IRWMP:

1. Facilitate regional cooperation in the following areas:
 - Water Supply Reliability
 - Water Recycling
 - Desalination
 - Water Conservation
 - Water Quality Improvements
 - Storm Water Capture and Management
 - Flood Management
 - Recreation and Access
 - Wetlands Enhancement and Creation
 - Environmental Habitat Protection and Improvement; and
2. Foster coordination, collaboration and communication amongst participating agencies to achieve greater efficiencies, enhance public services, and build public support for vital plans and projects.

The IRWMP will be developed by participating agencies and associations responsible for management of water and natural resources in the nine counties comprising the San Francisco Bay Area. In order to qualify for implementation grants provided for in Proposition 50, Chapter 8, the IRWMP will be completed and adopted by the appropriate agencies by January 1, 2007.

Figure 1 Participating Agency Boundaries



*BAWSCA Member Agencies include the 28 SFPUC regional system customers.

1.2 Description of the San Francisco Bay Area Region

The proposed IRWMP will cover the San Francisco Bay Region which includes the following nine counties: Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara, Marin, Napa, Solano and

Sonoma counties (see **Figure 2**). The geographic extent of this region is the San Francisco Bay Area watershed which falls under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (Region 2). A geographic file depicting the region (NAD 27 UTM 10 shape file) is attached to this application and has been submitted on CD (see Att3_PG_WorkPlan_3of4).

Figure 2 **Counties of the San Francisco Bay Area**



Population/Demographics. With over 6.5 million people, the Bay Area is the fifth largest metropolitan area in the United States. The region is home to a diverse population which includes Caucasians (58%), Asians (19%), Hispanics (19%), African Americans (8%) along with Pacific Islanders, American Indians and individuals of mixed ethnicities.¹

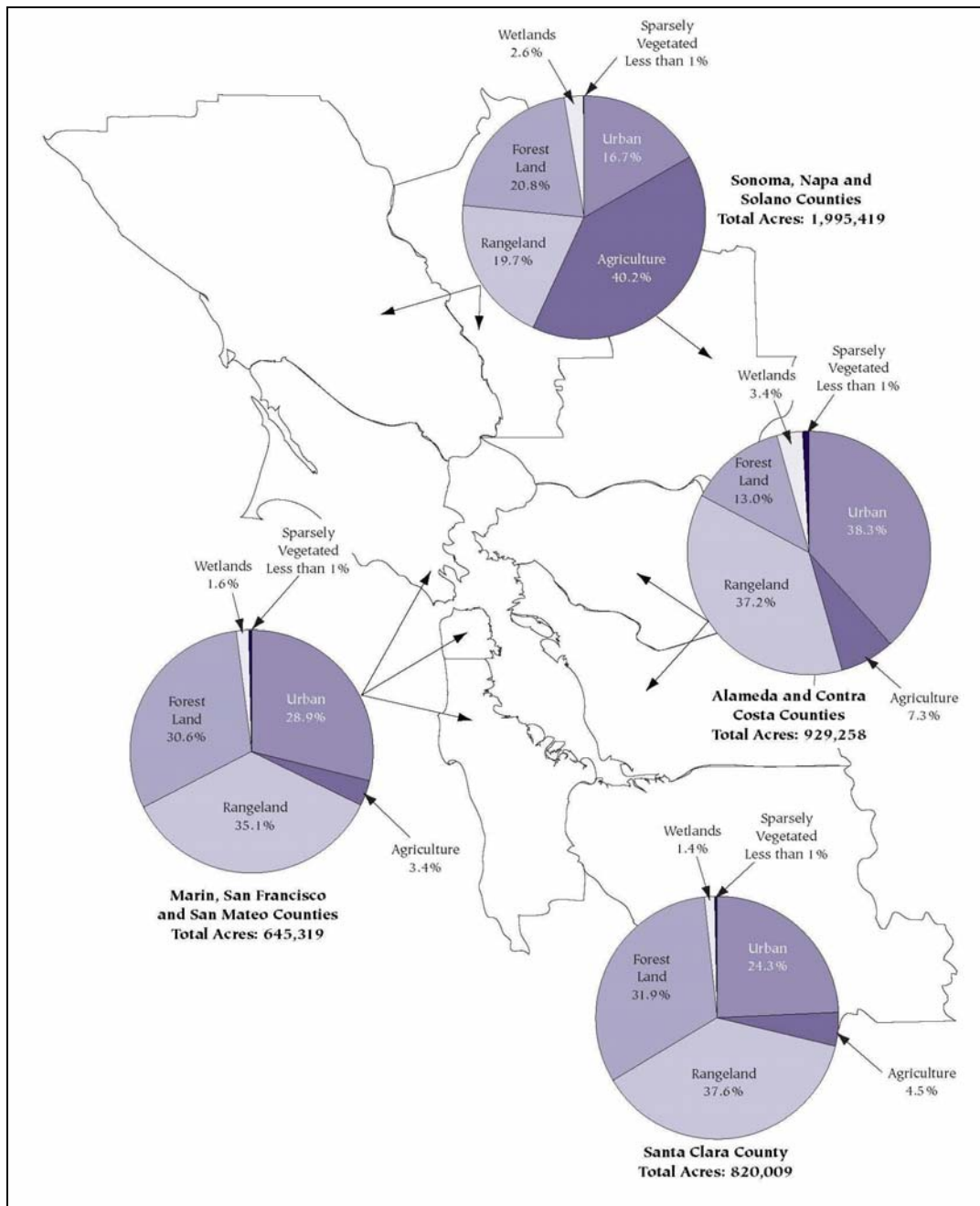
Economy. With an economy of almost \$300 Billion – the Bay Area ranks as the 24th largest economy in the world. On a per capita basis, it ranks ahead of all national economies, including the United States. The region is at the cutting edge of global technology and is a leader in many key indicators of regional, national and global competitiveness.² Water supply reliability and water quality are key components to the Bay Area's economy, especially during droughts when deliveries may be reduced to homes and businesses.

¹ 2000 U.S. Census.

² Bay Area Economic Forum: www.bayeconfor.org/baefregion.html

Land Use. The Bay Area comprises nine counties with varying degree of urbanization. The area encompasses three major metropolitan cities: San Francisco, San Jose, and Oakland located in the counties of San Francisco, Santa Clara, and Alameda. Agricultural acreage occurs mostly in the north and northeast counties of Napa, Marin, Sonoma, and Solano counties. Significant agricultural uses also occur at the fringe of urban development in Santa Clara and Alameda counties.³ **Figure 3** shows the various land-use patterns of the Bay Area.

Figure 3 Bay Area Land-Use Patterns



³ California Bay-Delta Authority. *California Water Plan Update 2005 Volume 3 – Regional Reports Public Review Draft*. April 2005.

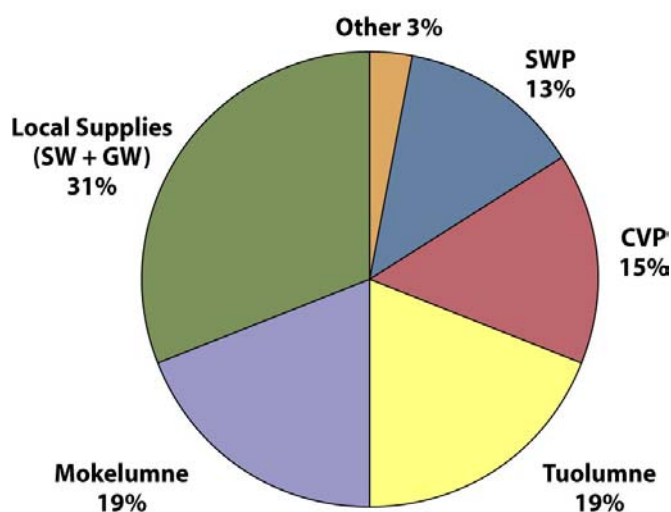
Environmental Resources. The Bay Area is part of the San Francisco Bay/Sacramento-San Joaquin Delta system, the largest estuary on the west coast of North and South America. The system’s freshwater streams, tidelands, marshlands, and rivers represent an environmentally sensitive ecosystem that supports over 750 plant and animal species. In addition, the system provides an important wintering site for migratory waterfowl and a spawning area for anadromous fish.

The Bay Area is currently home to 18 species that have been designated by state and federal agencies as threatened or endangered. These species include, but are not limited to: steelhead (*Oncorhynchus mykiss*); California red legged frog (*Rana aurora draytonii*); California tiger salamander (*Ambystoma californiense*); salt marsh harvest mouse (*Reithrodontomys raviventris*); and the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*).⁴

Water Supplies. As shown in **Figure 4**, The Bay Area agencies manage a diverse portfolio of water supplies including:

- Local Supplies: Groundwater, Surface water
- Sierra Nevada Supplies: Tuolumne, Mokelumne
- Delta Supplies: State Water Project (SWP), Central Valley Project (CVP), other
- Other: Desalination, Recycled Water, Water Transfers

Figure 4 Bay Area Water Use by Supply Source



These supplies currently serve a municipal and industrial (M&I) demand of over 1,200,000 acre-feet per year (AF/yr) for the region. **Figure 5** shows the major water-related infrastructure for the region.

The Bay Area’s existing water supplies are sufficient to meet current demands under normal hydrologic conditions. However, if the Bay Area experiences another drought similar to the critically dry year of 1977 or the multi-year drought period of 1987-1992, existing water supplies will not be able to meet the needs of the region.

⁴ California Department of Fish and Game, Habitat Conservation Planning Branch. *State and Federally Listed Endangered and Threatened Animals of California*. January 2005.

Receiving Water Quality. Under Section 303(d) of the federal Clean Water Act, the San Francisco Bay Region (Region 2) has approximately 79 waterbodies impaired by pollutants such as diazinon, mercury, sediment, pathogens, exotic species, and others. The San Francisco Bay is itself listed as being impaired by several pollutants including chlordane, DDT, diazinon, dieldrin, dioxin compounds, exotic species, furan compounds, mercury, PAHs, PCBs, and selenium.

The SF Bay RWQCB is currently working on the following Total Maximum Daily Loads (TMDLs) projects to identify the sources of pollutants and specify actions to reverse pollution trends:

- Napa River – Pathogens, Nutrients, Sediment
- San Francisco Bay – Copper, Exotic Species, Mercury, Nickel, PCBs
- San Francisco Bay Area Urban Creeks – Diazinon
- San Francisco Bay Area Urban Creeks – Sediment
- Sonoma Creek – Pathogens, Nutrients, Sediment
- Tomales Bay – Pathogens
- Walker Creek – Mercury

Benefits of Integrated Planning. The agencies and organizations participating in the development of an IRWMP for the Bay Area recognize that effective water management is crucial underpinning to the Bay Area's prosperity and continued leadership in economic development and environmental protection. Development of an IRWMP for the region offers the following advantages over individual local planning efforts:

- ✓ Fosters coordination, collaboration and communication between agencies
- ✓ Avoids conflicts and duplication of efforts
- ✓ Achieves greater efficiencies
- ✓ Enhances public/stakeholder support
- ✓ Enables identification of synergies between water management strategies across the region
- ✓ Maximizes benefits for the region
- ✓ Enhances future funding and partnering opportunities for all agencies in the region.
- ✓ Maximizes opportunities for achieving multiple benefits for individual projects and programs, as well as benefits to the region

1.3 Approach to Development of the IRWMP

Given the large geographic scope of the Bay Area region (nine counties serving over six and a half million people) and the wide range of water management strategies being implemented, the LOMU signed by the regional water management group outlined the following approach for development of an IRWMP for the Bay Area:

1. Prepare Regional Documents by Functional Area. This step involves compiling information from existing management plans into a regional document for each of the following functional areas:

- Water Supply/Water Quality (WS-WQ)
- Wastewater/Recycled Water (WW-RW)
- Flood Protection/Storm Water Management (FP-SM)
- Watershed Management/Habitat Protection & Restoration (WM-HP&R)

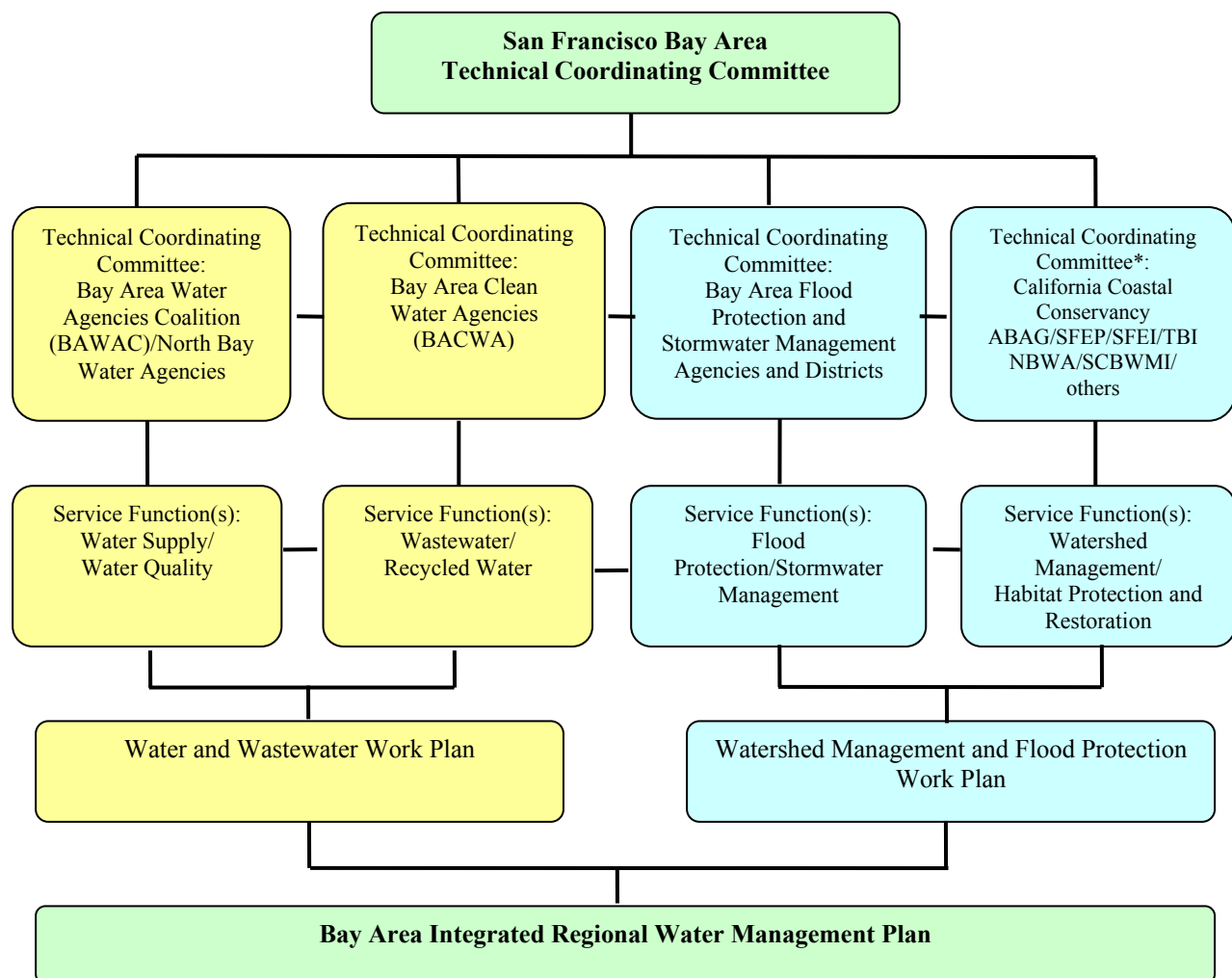
The purpose of these four documents is to (1) identify specific needs and challenges relating to the specific functional area; (2) describe water management strategies and approaches to address these needs; and (3) develop a list of potential strategies and implementation projects that would maximize benefits and enhance opportunities for regional cooperation within a given functional area.

2. Integrate Functional Area Documents into an IRWMP for the Bay Area. This step involves integrating the four functional area documents into an IRWMP for the Bay Area with input from the Bay Area TCC comprised of representatives from each of the four functional areas. The Bay Area TCC will work with stakeholders to identify where potential linkages between functional areas occur and where they may further interrelate to develop truly multi-purpose regional projects (e.g.

opportunities for combining wastewater treatment projects with water recycling needs or storm water management projects with habitat restoration needs).

Figure 6 displays how the work under each of these functional areas would be led by various regional groups.

Figure 6 Approach to Development of the Bay Area IRWMP



* The structure of this TCC has changed slightly since the conception of the LOMU. As a result, the graphic shown in the LOMU has been modified to reflect changes including a new TCC lead organization (California Coastal Conservancy) and addition of new participants (San Francisco Estuary Project, San Francisco Estuary Institute, and The Bay Institute).

As shown in Figure 6, the Bay Area IRWMP will be developed under the management and direction of the San Francisco Bay Area TCC (Bay Area TCC), as outlined in the attached LOMU (Att3_PG_WorkPlan_2of4).

1.4 Status of Current IRWMP Efforts

Work on the functional areas has begun and is in varying states of completion due to differences in availability of funds, staff, and other resources. A schedule depicting progress made up to date and plans for completion of these documents is shown in Figure 7.

Figure 7 Status of Functional Area Documents

Functional Area Document	2004												2005												2006													
	Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4				
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D		
WS-WQ																																						
WW-RW																																						
FP-SM																																						
WM-HP&R																																						

A description of progress made thus far on each document is provided below.

Water Supply and Water Quality Functional Area Document

BAWAC member agencies (ACWD, BAWSCA, CCWD, EBMUD, SFPUC, SCVWD, and Zone 7) and North Bay water agencies (MMWD, City of Napa, Sonoma CWA, and Solano CWA) have recently completed a draft WS-WQ Document (see Att3_PG_WorkPlan_4of4). It is anticipated that this document will need to be updated to reflect additional information made available as part of the 2005 Urban Water Management Plans and to include the most up-to-date list of projects identified to address water supply and water quality related issues. The scope of this effort is described further in **Task 2.1** of the Work Items. If awarded, completion of this work would be funded in part from monies received through this Proposition 50, Chapter 8, planning grant submitted by the water and wastewater agencies.

Wastewater and Recycled Water Functional Area Document

BACWA is leading the effort to prepare the WW-RW functional area document. Work on this document is anticipated to be completed by December 2005. In 1999, a major regional recycling report was published, entitled Bay Area Regional Water Recycling Program. The executive summary of this document can be made available upon request. Additional work planned consists of addressing regional wastewater issues such as TMDLs through the Clean Estuary Partnership (BACWA, BASMAA, and the San Francisco Bay RWQCB), regional biosolids planning and pollution prevention as well as filling missing data gaps in existing water recycling reports. The effort is described further in **Task 2.2** of the Work Items. If awarded, completion of this work would be funded in part from monies received through this Proposition 50, Chapter 8, planning grant submitted by the water and wastewater agencies.

Flood Protection and Storm Water Management Functional Area Document

Bay Area storm management and flood control agencies are taking the lead in preparing this document. The goal is to identify and address the major flood protection and stormwater management objectives and conflicts for the watersheds in the region. The work will include identifying opportunities and efficiencies possible by working collaboratively within the region towards multi-benefit, multi-beneficiary management of resources. It is anticipated that much of the

work will be completed by September 2005. Additional work beyond the existing scope will be required, however, to fill in missing data gaps and to include some flood protection agencies not currently participating in the effort. If awarded, completion of this work would be funded in part from monies received through a Proposition 50, Chapter 8 planning grant being submitted by the watershed management, flood protection and stormwater management agencies and organizations (refer to the Bay Area's *Watershed Management and Flood Protection Work Plan*). As a result, completion of this document is not part of this work plan (i.e. the *Water and Wastewater Work Plan*).

Watershed Management and Habitat Protection and Restoration

The Watershed Management/Habitat Protection and Restoration (WMHPR) functional area document is being developed under the leadership and principal funding of the California Coastal Conservancy, its consultants (Jones & Stokes Associates, San Francisco Estuary Institute, MIG, and Association of Bay Area Governments/San Francisco Estuary Project), and a technical coordinating committee (including representatives from the Regional Water Quality Control Board, San Francisco Bay Region; California Bay Delta Authority; SF Bay Conservation & Development Commission; The Bay Institute; Bay Area Open Space Council; San Francisco Public Utilities Commission; Santa Clara Valley Water District; Sonoma County Water Agency; Sonoma Ecology Center; Clean South Bay; and others). The objectives of the Watershed Management/Habitat Protection and Restoration (WMHPR) component are multi faceted, and include: compiling existing data into a geographic information system (GIS) and web database; developing scientifically valid goals to prioritize water quality, species recovery, and habitat protection/restoration objectives; describing and inventorying existing plans, projects, and conditions; and evaluating/prioritizing potential restoration projects. It is anticipated that this work will be completed by December 2005. If awarded, completion of this work would be funded in part from monies received through a Proposition 50, Chapter 8 planning grant being submitted by the watershed management, flood protection and stormwater management agencies and organizations (refer to the Bay Area's *Watershed Management and Flood Protection Work Plan*). As a result, completion of this document is not part of this work plan (i.e. the *Water and Wastewater Work Plan*).

1.5 Planning Objectives

Objectives relating to major water related issues and conflicts within the region are first being developed for each functional area based on input from the associated water agencies, wastewater agencies, flood control districts and watershed groups. As noted in Section 1.4, the functional area documents are in varying states of completion and therefore a complete list of objectives is not yet available. **Table 1** lists the planning objectives established thus far to address the needs of the region. Additional objectives for the WW-RW functional area will be developed as part of **Task 2.2**. These objectives will then be further refined with input from project stakeholders as the four functional area documents are integrated into an overall IRWMP (see **Task 3.1.3** in the Work Items for more detail).

Table 1 **Draft Bay Area IRWMP Objectives for the *Water and Wastewater Work Plan***

Objective	Sub-objective
Maximize Supply Reliability	<ul style="list-style-type: none">• Meet Demands• Minimize Vulnerability• Maximize Control with the Bay Area Region
Maximize Public Health Protection	<ul style="list-style-type: none">• Minimize Disinfection By-Products• Minimize Total Dissolved Solids• Minimize Variability for Treatment• Minimize Taste and Odor Problems
Minimize Cost Impacts	<ul style="list-style-type: none">• Minimize total cost• Allocation of costs
Minimize Environmental Impacts	<ul style="list-style-type: none">• Minimize net impacts to environment• Maximize net benefits to environment
Maximize Implementation Potential	<ul style="list-style-type: none">• Maximize external support• Maximize ability to get outside funding• Maximize internal consistency and agency plans and baselines

Objectives related to watershed management, habitat protection and restoration are included in the *Watershed Management and Flood Protection Work Plan*.

1.6 *Integration of Water Management Strategies*

Specific water management and related strategies are being developed first at each functional area level based on input from the associated water agencies, wastewater agencies, flood control districts and watershed groups. As noted in Section 1.4, the four functional documents are at varying stages of completion and therefore a comprehensive list of water management strategies is not yet available. The following is a list of preliminary water management strategies to be considered in the overall IRWMP. This list will be further refined as the functional area documents are integrated into an overall IRWMP (see **Task 3.1.4** in the Work Items for more detail):

- Ecosystem Restoration
- Environmental Habitat Protection and Improvement
- Flood Management
- Groundwater Management
- Recreation and Public Access
- Storm water Capture and Management
- Water Conservation
- Water Recycling
- Wetlands Enhancement and Creation
- Conjunctive Use
- Desalination
- Imported Water
- Land Use Planning
- Non-Point Source Pollution Control
- Surface Storage
- Watershed Planning
- Water and Wastewater Treatment

-
- Water Transfers
 - Groundwater Banking

This preliminary list incorporates the Water Management Strategies included in Table A-1 of the IRMWP Guidelines as well as additional water management strategies currently being implemented in the Bay Area. These strategies work together to achieve established water management objectives relating to the four functional areas: (1) Water Supply and Water Quality; (2) Wastewater and Recycled Water; (3) Flood Protection and Stormwater Management, and (4) Watershed Management and Habitat Protection and Restoration.

1.7 Implementation

At this time most implementation efforts are expected to be handled at the agency or multi-agency level. A new regional entity responsible for all implementation efforts is not expected. The process for implementing the Bay Area IRMWP will be discussed further during development of the IRWMP. The logistics relating to plan implementation will depend upon the final list of prioritized projects that will be developed following integration of the four functional area documents into an overall IRWMP for the Bay Area. The process for identifying, integrating and prioritizing the IRWMP projects is further described in **Tasks 3.1.5, 3.1.6 and 3.1.7** of the Work Items.

1.8 Impacts and Benefits

Many of the existing plans that will underlie the Bay Area IRWMP include extensive reviews of impacts and benefits. The overall IRWMP will build on this and add more detail during integration of the four functional documents into an overall IRMWP for the Bay Area. The process for determining impacts and benefits of plan development and implementation is described further in **Task 3.1.8** of the Work Items.

1.9 Data and Technical Analysis

The data used to support development of the functional area documents is based on individual planning documents and studies provided by each participating agency/organization including but not limited to:

- Urban Water Management Plans
- Integrated Water Resources Plans
- Groundwater Management Plans
- Watershed Management Plans
- Habitat Conservation Plans
- Storm Water Management Plans
- Flood Management Plans
- Water Quality Plans
- Capital Improvement Plans
- Bay Area Regional Water Recycling Program Master Plan (1999)
- California Bay-Delta Authority (CALFED Bay-Delta Program) Regional Studies
- BAWAC Advancements in Water Conservation Report and Database (2002)
- Bay Area Water Management Elements Study and Database (2004)
- Clean Estuary Partnership (2003)

As stated in Section 1.4, some additional work will be required to complete these functional area documents and fill any missing data gaps. These efforts are described further in **Task 2** of the Work Items. Further, additional data needs and monitoring needs will be identified once the four functional

areas are integrated into an overall IRWMP for the Bay Area. The process for identifying such gaps is described in **Task 3.1.9** of the Work Items.

1.10 Data Management

The data used in development of the plan will be disseminated to stakeholders, agencies and the public, and all collected reports and references will be compiled into a data library to be made available for state-wide data integration efforts. Additional information relating to the data management efforts is included in **Task 3.1.10** of the Work Items.

1.11 Stakeholder Involvement

Stakeholder identification and involvement is an important part of developing the Bay Area IRWMP. As discussed in the LOMU, a preliminary list of project stakeholders includes environmental groups, regulatory agencies, and the California Bay-Delta Authority. A more comprehensive list of stakeholders will be identified as part of **Task 1.3** of the Work Items. General public outreach will be on-going throughout the development of the Bay Area IRWMP and TCC meetings will be conducted in an open forum where interested parties can participate. In addition, specific workshops will be conducted at critical decision points during the development of the IRWMP to obtain input and feedback from key stakeholders (see **Tasks 3.1.3, 3.1.5, 3.1.7** and **3.2**). The stakeholder involvement process will be documented as part of **Task 3.1.14** of the Work Items. In addition, many of the plans referenced in Section 1.9 used to support development of the functional area documents and IRWMP have had extensive stakeholder involvement processes as they were developed and approved.

1.12 Disadvantaged Communities

Although some areas of disadvantaged communities exist within the Bay Area, the region as a whole does not meet the state's definition for a disadvantaged community. As such, this application is not seeking any waiver or reduction in funding match for disadvantaged communities. That being said, disadvantaged communities will be invited to participate in the planning process to provide input on water management strategies and how they can address environmental justice issues in their communities.

1.13 Relation to Local Planning

As discussed in the LOMU, Bay Area water supply agencies periodically update their water supply plans to address changes in land-use or population projections within the areas they serve in order to develop refined water demand projections. When updating the water supply plans, the water agencies consult with local land-use agencies and rely on approved local land-use plans (e.g., general plans) within their jurisdiction. In addition, ABAG (a regional land use planning entity) is a signatory to the LOMU and will be involved in the development of the IRWMP. The process for coordinating with local and regional land-use planning entities in developing the Bay Area IRWMP will be documented as part of **Task 3.1.13** of the Work Items.

1.14 Agency Coordination

As discussed in the LOMU, it is anticipated that project participants will include local agencies, regulatory agencies and state/federal agencies. Staff from regulatory agencies such as the San Francisco Bay Regional Water Quality Control Board (RWCQB), California Department of Health Services (DHS), U.S. Environmental Protection Agency (EPA), and staff from the California Bay-Delta Authority (Authority) will be invited to participate in various TCC meetings and project workshops throughout the development of the IRWMP to provide advice and direction as appropriate and to serve as a link between the Bay Area and other State/Federal efforts. If representatives from these agencies are not able to participate, the TCC will keep them advised of the project progress and seek guidance as needed.

Coordination with local-land use decision makers will also be incorporated in the development of the IRMWP. This will be facilitated in part by the participation of ABAG in the development of Bay Area IRWMP.

2 Work Items

The following scope of work outlines the process by which agencies involved in water supply, water quality, wastewater, and/or recycled water will develop their functional area plans and then work with the *Watershed Management and Habitat Protection and Restoration and Flood Protection and Stormwater Management* functional areas to develop an IRWMP for the Bay Area given the current status of the functional area documents and the specific requirements of the IRWM Grant Program Guidelines published in November 2004.

Task 1 – Project Coordination

This task involves regular communication and coordination with participating agencies, organizations, and stakeholders to confirm project direction and approach and to ensure that the IRWMP is completed on time and on budget. The Plan will be developed under the management and direction of the Bay Area TCC.

1.1 Project Communication and Coordination

This subtask involves general communication and coordination with project participants regarding the direction, approach and status of the Bay Area IRWMP.

As previously described, the LOMU establishes for each of the four functional areas a leadership entity called a technical coordinating committee (TCC). The LOMU further establishes the Bay Area TCC which is comprised of two or three representatives from each of these TCCs. The Bay Area TCC oversees and gives direction to the development of the overall Bay Area IRWMP.

Up to now the functional area TCCs and the Bay Area TCC have been operating informally. The Bay Area TCC will consider a more formal structure, such as outlined in the LOMU, in order to better facilitate the efforts outlined in the two work plans, ensure proper management of the grants, and meet project deadlines. Such formality would not be intended to limit participation in the IRWMP process. There would still be significant opportunity for any stakeholder or other interested party to give input to the individual or Bay Area TCCs through workshops, other meetings, and various forms of communications.

As part of this task, a kick off meeting will be held with the Bay Area TCC Project Management Team, the Watershed Management and Flood Protection TCC, and other project stakeholders to discuss the scope, schedule and approach of the Bay Area IRWMP effort. The TCC and other project stakeholders will be kept apprised of the status of the project through regular monthly meetings. In addition, monthly status updates will be developed to outline progress completed to date and outstanding action items. These monthly updates will be combined into quarterly reports and distributed electronically.

Key Outcomes:

- Effective coordination of the development of Bay Area IRWMP
- Project participants are kept informed of the project status

Subtask 1.1 Deliverables:

1. Bay Area TCC project management team kickoff meeting
2. Monthly meetings (agendas, minutes)
3. Monthly Status Reports (progress, budget and schedule)
4. Quarterly Reports

1.2 Project Controls

This subtask involves reviewing the specific work performed by other agencies and/or consultants and maintaining and updating the project budget and schedule to ensure the IRWMP is completed as planned, on time and within the budget. Updates on project status, budget, and schedule will be included in the monthly status updates (see Subtask 1.1 Deliverables).

It is understood that even though representatives of each functional area and the Bay Area TCC will have responsibility for carrying out the plan and exercising controls as described above, DWR and the State Board will look to the agencies with whom they contract for grants to exercise appropriate controls to see that funds are expended appropriately per the terms of the agreement. In the case of this proposal (i.e. the *Water and Wastewater* agencies' grant proposal), Zone 7 Water Agency is the applicant and will be the contracting agency. For the *Watershed Management and Flood Protection* entities' proposal the applicant and contracting agency will be the California Coastal Conservancy.

Key Outcomes:

- High quality Bay Area IRWMP completed on-time and within budget.

1.3 General Outreach

This subtask involves general outreach activities to involve the public and other stakeholders throughout the development of the Bay Area IRWMP which includes integration of all four functional areas including (1) Water Supply and Water Quality; (2) Wastewater and Recycled Water; (3) Flood Protection and Stormwater Management, and (4) Watershed Management and Habitat Protection and Restoration. Additional stakeholder involvement is further described and budgeted throughout the Work Plan at key steps in the IRWMP development process (see **Tasks 3.1.3, 3.1.4, 3.1.7, and 3.2**). The purpose of this general outreach task is to ensure involvement of all interested stakeholders, provide regular status updates on the IRWMP development process, and obtain stakeholder support of the final plan. These objectives will be undertaken by first developing a stakeholder involvement strategy in cooperation with the Watershed Management and Flood Protection TCC. The strategy will be reviewed by the Bay Area TCC and then implemented by:

1. Developing a comprehensive list of stakeholders to be included in the IRWMP process.
2. Updating the contact list as necessary to reflect any new stakeholders identified during the development of the IRWMP.
3. Regularly informing stakeholders about the status of the IRWMP by maintaining a website, distributing regular newsletters and e-mail announcements; and holding periodic Bay Area TCC meetings as appropriate.

These objectives will be accomplished by undertaking the following work under this subtask:

1. Develop a stakeholder involvement strategy for approval by the Bay Area TCC that:
 - Targets all stakeholders
 - Involves stakeholders in all key issues including development of project objectives, identification of linkages between functional areas, identification of potential multi-benefit projects and water management strategies, potential constraints, and implementation measures
 - Minimizes costs and maximizes efficiencies by, for example, using meeting forums and newsletters, where feasible.
2. Implementation of this strategy will be accomplished through various means including targeted meetings and workshops, posting information on a website, recording stakeholder input, and summarizing how it is being incorporated into the IRWMP.

Key Outcomes:

- Fully informed Bay Area IRWMP stakeholders
- Stakeholder support for final Bay Area IRWMP

Subtask 1.3 Deliverables:

1. Stakeholder involvement strategy
2. Stakeholder List
3. General communication materials (e.g. website, newsletters, email announcements, Bay Area TCC meeting minutes, etc)

Task 2 – Complete Functional Area Documents

As previously stated, progress on development of each functional area document varies. This task involves updating and/or completing the documents so they can be integrated into the overall IRWMP.

2.1 Update Water Supply/Water Quality (WS-WQ) Document

This subtask involves updating the existing WS-WQ document (see Att3_PG_WorkPlan_4of4) as needed to include (1) updated information on population, water supplies and water demand currently being developed as part of each agency's 2005 Urban Water Management Plan; and (2) any new projects identified to meet water supply and water quality needs for the region.

Key Outcomes:

- Complete WS-WQ document ready for integration into the Bay Area IRWMP

Subtask 2.1 Deliverables:

1. Draft Final WS-WQ Functional Area document
2. Final WS-WQ Functional Area document

2.2 Complete Wastewater/Recycled Water (WW-RW) Document

This subtask involves completing a WW-RW Functional Area document by addressing regional wastewater issues such as TMDLs through the Clean Estuary Partnership (BACWA, BASMAA, and San Francisco Bay RWQCB), addressing regional biosolids planning and pollution prevention as well as filling missing data gaps in existing water recycling reports.

Key Outcomes:

- Complete WW-RW document ready for integration into the Bay Area IRWMP

Subtask 2.2 Deliverables:

1. Draft Final WW-RW Functional Area document
2. Final WW-RW Functional Area document

2.3 Complete Storm Water Management/Flood Protection (SM-FP) Document

[This subtask and its associate deliverables and budget are described in the Watershed Management and Flood Protection Work Plan]

2.4 Complete Watershed Management/Habitat Protection & Restoration (WM-HP&R) Document

[This subtask and its associate deliverables and budget are described in the Watershed Management and Flood Protection Work Plan]

Task 3 – Integrate the Functional Area Documents into a Bay Area IRWMP

This task builds upon the integration within each functional area (Task 2) by both integrating between two functional areas (e.g. Water Supply/Water Quality and Wastewater/Recycled Water) and between all four functional areas to develop a comprehensive IRWMP for the Bay Area. Such integration will:

- Allow the region to identify common/related challenges across functional areas and opportunities for collaboration on potential solutions that would achieve multiple benefit projects
- Allow the region to identify potential synergies between functional areas across the Bay Area
- Facilitate coordination between various water management strategies identified so that conflicts and duplication of efforts are minimized
- Allow for development of a regional framework for evaluating multi-objective projects and water management strategies

This task and the subtasks described herein involve coordination of specific efforts related to the *Water and Wastewater Work Plan* and the *Watershed Management and Flood Protection Work Plan* and integration across all four functional areas to develop a comprehensive IRWMP for the Bay Area.

3.1 Develop Administrative Draft IRWMP

This subtask involves development of an administrative draft IRWMP for the Bay Area. The outline for the IRWMP has been modeled after the Plan Standards as shown in Appendix A of the Grant Program Guidelines and includes the chapters described in the following subtasks. It should be noted that some of these tasks involve documentation of work completed as part of the functional area documents while others involve additional analysis.

Development of the Administrative Draft IRWMP necessarily requires at least near completion of the drafts of all four functional area documents. The Bay Area TCC, in its leadership role over the entire IRWMP process, will ensure all functional area documents are completed in time for integration into an overall Bay Area IRWMP.

Key Outcomes:

- Complete Administrative Draft IRWMP

Subtask 3.1 Deliverables:

1. Administrative Draft IRWMP

3.1.1 Regional Group

This subtask involves the development of the draft *Regional Water Management Group* section of the IRWMP. As part of this subtask, the regional associations, water management groups, and individual agencies responsible for development and implementation of the IRWMP will be described along with each organization's role in management of Bay Area water or natural resources.

Key Outcomes:

- Comprehensive description of Bay Area regional water management group and various roles/responsibilities in water management

Subtask 3.1.1 Deliverables:

1. Draft *Regional Water Management Group* section

3.1.2 Region Description

This subtask involves the development of the draft *Region Description* section of the IRWMP. As part of this subtask, the following information relating to the region will be compiled and summarized in texts and/or on maps and charts as appropriate:

- Jurisdictional boundaries (e.g. county lines, city lines, special districts, service areas, etc.)
- Physiographic boundaries (e.g. watershed boundaries, groundwater basins, etc.)
- Major water-related infrastructure and land-use divisions
- Water supply and demand information
- Water quality information
- Regional characterization (e.g. environmental resources, social/cultural makeup; economic conditions and trends)
- Other characteristics, as appropriate

Key Outcomes:

- Comprehensive description of the Bay Area region including its jurisdictional and physiographic boundaries, water supply/demand and quality information, water infrastructure, land use divisions, environmental resources, and social/cultural makeup.

Subtask 3.1.2 Deliverables:

1. Draft *Region Description* section

3.1.3 Objectives

This subtask involves the development of the draft *Objectives* section of the IRWMP. As part of this subtask, the objectives presented in each functional area document will be reviewed, refined, and combined to develop a comprehensive list of objectives addressing all water related issues including, but not limited to, water supply, groundwater management, and water quality. The draft list of objectives will be reviewed by the Bay Area TCC and will be presented to stakeholders at a kick-off stakeholder workshop (Workshop #1). Other meetings and scoping sessions will be held as appropriate. The draft list will then be revised based on stakeholder input in order to be subsequently incorporated into the draft *Objectives* section.

Key Outcomes:

- Identification of regional planning objectives for the Bay Area that has the support of project participants and stakeholders.

Subtask 3.1.3 Deliverables:

1. Stakeholder Workshop # 1

-
2. Other inter-agency meetings and public scoping sessions
 3. Draft *Objectives* section

3.1.4 Water Management Strategies

This subtask involves the development of the draft *Water Management Strategies* section of the IRWMP. As part of this subtask, the water management strategies identified in the functional area documents will be compiled into comprehensive list addressing all water related issues. The draft list of water management strategies and associated projects will be reviewed by the Bay Area TCC to be subsequently incorporated into the draft *Water Management Strategies* section.

Key Outcomes:

- A comprehensive list of projects and programs identified for the Bay Area region that comprises all four functional areas of water management.

Subtask 3.1.4 Deliverables:

1. Draft *Water Management Strategies* section

3.1.5 Integration

This subtask involves development of the draft *Integration* section of the IRWMP. It involves the integration of sub-elements, objectives, and broad categories of projects and program ideas from each of the four functional area documents into a draft Integration section of the IRWMP. This task also involves examining the *Water Management Strategies* from Section 3.1.4 to identify those with the highest potential to meet multiple objectives and regional priority needs. The essence of this task is to (1) bring the four functional area documents together into a coherent plan, and (2) highlight projects and programs that can (or do) share resources, offer efficiencies, and provide synergy and multiple benefits across functional areas and between agencies.

One product of this subtask will be an identification of on-going or planned projects or programs that can accomplish multiple benefits. Another outcome will be to develop project “prototypes” that can serve as models for future integration ideas for all agencies. These can be captured in graphic and map form. The final product of this subtask will be an *Integration Section* for the IRWMP.

One current example of how integration can achieve multiple benefits is the Clean Estuary Partnership involving BASMAA, BACWA, and the Regional Water Quality Control Board, addressing TMDLs in the Bay and Estuary. Another example where integration can offer multiple benefits is to identify floodplain storage opportunities that can address storm water and water quality needs, flood protection and enhanced riparian and wetland protection and restoration. Yet another example is where a conjunctive use project may also serve habitat management and agricultural objectives (and possibly even recreational objectives), while offering water supply, recharge and storage benefits. It is important to note that these examples are not restricted simply to linking specific projects, but rather can highlight conceptual approaches that can help all stakeholders.

As part of this task, Workshop #2 will be held, as well as inter-agency meetings and briefings, to obtain input from stakeholders and the public regarding opportunities for integration of water management strategies, projects and programs. This will also serve as a coordination vehicle for agencies seeking partnerships and looking for collaboration opportunities.

Key Outcomes:

-
- Identification of common/related challenges and opportunities for collaborative solutions across functional areas
 - Identification of synergies that results from integration of water management strategies to meet regional priorities and achieve multiple benefits
 - Stakeholder support
 - List of projects meeting multiple objectives and regional priority needs

Subtask 3.1.5 Deliverables:

1. Draft *Integration* section
2. Example (or model) projects and programs where integration is occurring (or planned) to highlight ideas for all stakeholders.
3. Stakeholder Workshop # 2, scoping sessions and inter-agency meetings and meeting summaries.

3.1.6 Regional Priorities

This subtask involves the development of the draft *Regional Priorities* section of the IRWMP. As part of this subtask, short-term and long-term regional priorities identified in the individual functional area documents will be refined to incorporate stakeholder feedback resulting from Workshops #1 and #2, and will be incorporated into a comprehensive list for review by the Bay Area TCC. The regional priorities will be presented in an open forum (e.g. Bay Area TCC meeting) for further comment by the TCC and other project participants. A draft *Regional Priorities* section will then be prepared to document the regional priorities, the process by which they were established and the process by which they will be refined as needed to respond to regional changes.

Key Outcomes:

- List of short-term and long-term priorities for the Bay Area region that can be utilized in identification of high priority projects.

Subtask 3.1.6 Deliverables:

1. Draft *Regional Priorities* section

3.1.7 Implementation

This subtask involves the development of the draft *Implementation* section of the IRWMP. As part of this subtask, a draft plan will be developed that includes recommended projects and water management strategies that meet multiple plan objectives as identified in **Task 3.1.5 (*Integration*)**. The implementation plan will:

- Document the prioritization process for projects in the region
- Identify linkages and interdependence between projects
- Discuss economic and technical feasibility of each project on a programmatic level
- Identify current status of each project
- Include timelines for implementation that extend beyond the adoption of the IRWMP
- Identify institution structure to ensure Plan implementation

The draft implementation plan will be reviewed by the Bay Area TCC and presented at a stakeholder workshop (Workshop #3). The implementation plan will then be revised based on stakeholder feedback and incorporated into the draft *Implementation* section. The intent of the IRWMP is not to supercede or impede individual agencies' or group's efforts in planning for, prioritizing, and implementing water and

watershed management strategies or projects. Instead, the IRWMP will be implemented in addition to each agency's plans and projects.

Key Outcomes:

- A plan for implementation of recommended projects and programs for the Bay Area region that has support of project participants and stakeholders.

Subtask 3.1.7 Deliverables:

1. Stakeholder Workshop # 3, scoping sessions, and inter-agency meetings
2. Draft *Implementation* section

3.1.8 *Impacts & Benefits*

This subtask involves the development of the draft *Impacts & Benefits* section of the IRWMP. As part of this subtask, potential impacts and benefits associated with implementation of the projects included in the *Implementation* section will be documented based on information included in the functional area documents completed as part of **Task 2**. Potential impacts and benefits will be presented at an open forum (e.g. TCC meeting) for feedback and comment by the TCC and other interested project stakeholders.

CEQA compliance will be a requirement for all implementation projects. Some projects may have already completed CEQA certification. Other proposed projects will need to undertake appropriate environmental review. The IRWMP is not intended to be a CEQA compliance document. Instead, entities responsible for implementing projects have the responsibility of ensuring that all appropriate environmental approvals have been met. Feedback from the TCC and other stakeholders as to potential impacts and benefits will be documented in the draft *Impacts & Benefits* section along with a discussion of CEQA requirements.

Key Outcomes:

- Identification of potential impacts and benefits associated with implementation of recommended projects.

Subtask 3.1.8 Deliverables:

1. Draft *Impact & Benefits* section

3.1.9 *Technical Analysis & Plan Performance*

This subtask involves the development of the draft *Technical Analysis & Plan Performance* section of the IRWMP. As part of this subtask, the data, technical methods and analysis used in the development of the functional area documents and overall IRWMP will be documented, and the need for any additional water supply or water quality monitoring and other types of data gaps will be identified. In addition, local agency and regional performance measures will be compiled and reviewed to identify those that are most relevant to the IRWMP. These will entail a mix of quantitative and qualitative measures that comprehensively assess and evaluate the effectiveness of recommended projects and the overall IRWMP. A draft section documenting data reviewed, data gaps, performance measures and corrective actions for Plan implementation will be incorporated into the draft *Technical Analysis & Plan Performance* section. The final list of performance measures and management strategies will take into account the technical

analysis and tools described in the *Watershed Management and Flood Protection Work Plan* including results from the proposed *Project Assessment Framework*.

Key Outcomes:

- List of quantitative and qualitative performance measures to assess and evaluate the effectiveness of recommended projects

Subtask 3.1.9 Deliverables:

1. Draft *Technical Analysis & Plan Performance* section

3.1.10 Data Management

This subtask involves the development of the draft *Data Management* section of the IRWMP. As part of this subtask, the mechanisms by which data will be managed and disseminated to the public and stakeholders (e.g., use of web-based database application described in the *Watershed Management and Flood Protection Work Plan*, posting information on the participating agencies' websites, providing newsletters with directions on how to obtain available documents, holding project-specific workshops where stakeholders can review data and provide comments, etc.) will be described.

In addition, the section will also describe how water quality monitoring data collected as part of the Plan's implementation will be formatted to facilitate integration into the SWRCB's statewide data management efforts (e.g. data specific to surface water quality monitoring efforts will be made available to the SWRCB's Surface Water Ambient Monitoring Program (SWAMP), data specific to groundwater quality monitoring efforts will be made available to the SWRCB's Groundwater Ambient Monitoring and Assessment (GAMA) Program, etc).

Key Outcomes:

- An effective data management and dissemination strategy that will support statewide data needs

Subtask 3.1.10 Deliverables:

1. Draft *Data Management* section

3.1.11 Financing

This subtask involves the development of the draft *Financing* section of the IRWMP. As part of this subtask, the financial arrangements for implementation, operation and maintenance of the proposed Bay Area IRWMP projects will be documented. Potential funding through local, state, and federal agencies will be identified.

Key Outcomes:

- Financing plan for construction, operation, and maintenance of recommended projects

Subtask 3.1.11 Deliverables:

1. Draft *Financing* section

3.1.12 State-wide Priorities

This subtask involves the development of the draft *State-wide Priorities* section of the IRWMP. As part of this subtask, statewide or State agency priorities (e.g. CALFED objectives, DWR's Recycled Water Task Force, DWR's Water Desalination Task Force, etc.) met by implementation of the IRWMP will be identified and documented in the draft *State-wide Priorities* section.

Key Outcomes:

- List of statewide or state agency priorities met by implementation of the IRWMP.

Subtask 3.1.12 Deliverables:

1. Draft *State-wide Priorities* section

3.1.13 Relation to Local Planning

Bay Area water supply and wastewater agencies periodically update their water supply and wastewater plans to address changes in land-use or population projections within the areas they serve in order to develop refined water demand and wastewater production projections. When updating the water supply plans, the water agencies consult with local land-use agencies and rely on approved local land-use plans (e.g. general plans) within their jurisdiction.

This subtask involves the development of the draft *Relation to Local Planning* section of the IRWMP. As part of this subtask, a description of how water and wastewater agencies integrate local land use planning and decisions into their planning documents. This subtask will also describe how the IRWMP relates to planning documents, goals, objectives and programs established by local water supply and wastewater agencies. Coordination with local land-use planning decision-makers and regional land-use planning entities (ABAG) throughout the development of the IRWMP will be documented.

Key Outcomes:

- Description of local planning efforts and their relationship to the Bay Area IRWMP

Subtask 3.1.13 Deliverables:

1. Draft *Relation to Local Planning* section

3.1.14 Stakeholder Involvement

This subtask involves the development of the draft *Stakeholder Involvement* section of the IRWMP. As part of this subtask, the process for identifying project stakeholders and involving them throughout the development of the IRWMP will be documented.

Several stakeholder outreach activities are planned during development of the Bay Area IRWMP. These will include general outreach activities to keep stakeholders informed (see **Task 1.3**) on the status of the IRWMP as well as targeted outreach activities in the form of stakeholder workshops at key steps in the IRWMP development process. As presented in the Work Plan, direct stakeholder involvement will be sought at four stakeholder workshops to obtain input and consensus on:

1. Proposed planning objectives (see **Task 3.1.3**);
2. Integration of water management strategies, projects, and programs (see **Task 3.1.5**);
3. The proposed implementation plan (see **Task 3.1.7**); and

4. The Public Draft IRWMP (see **Task 3.2**)

All stakeholder outreach activities will be documented in a draft *Stakeholder Involvement* section to be subsequently incorporated into the Draft IRWMP.

Key Outcomes:

- Documentation of the comprehensive stakeholder outreach process used in the development of a Bay Area IRWMP

Subtask 3.1.14 Deliverables:

1. Draft *Stakeholder Involvement* section

3.1.15 Coordination w/ State & Federal Agencies

This subtask involves the development of the draft *Agency Coordination* section of the IRWMP. As part of this subtask, state or federal agency involvement in the development of the IRWMP and specific projects identified will be documented. A discussion of how these agencies can provide assistance to ensure timely completion of the IRWMP will also be provided.

Key Outcomes:

- Documentation of state and federal agency coordination process

Subtask 3.1.15 Deliverables:

1. Draft *Agency Coordination* section

3.2 Prepare Public Draft IRWMP

This task involves incorporating comments from the Bay Area TCC on the Administrative Draft IRWMP into a Public Draft IRWMP. This draft document will be made available to stakeholders for review. In addition, a workshop (Stakeholder Workshop # 4) will be held to update stakeholders on the IRWMP progress and present findings.

Key Outcomes:

- Complete Public Draft IRWMP
- Obtain stakeholder feedback on the Draft IRWMP to ensure support of final plan

Subtask 3.2 Deliverables:

1. Public Draft IRWMP
2. Stakeholder Workshop #4

3.3 Prepare Final IRWMP

This task involves incorporating stakeholder comments from Workshop #4 and comments from all other participating agencies, the California DWR and SWRCB, stakeholders, and other interested parties. The *Final IRWMP* will be completed and adopted prior to the January 1, 2007, deadline.

Key Outcomes:

- Complete IRWMP by January 1, 2007

Subtask 3.3 Deliverables:

1. Final IRWMP

3 Work Budget

The estimated budget for the *Water and Wastewater Work Plan* is \$552,000 with \$387,000 in grant funding requests and \$165,000 in matching funds. This represents a funding match of 30% per the IRWMP Guidelines for Planning Grant Applications. A budget breakdown by task is shown in the following page.

As shown in the budget, matching funds for completion of the Water Supply/Water Quality functional area document have been provided by eleven Bay Area water agencies through a contract with Contra Costa Water District and its consultant, RMC Water and Environment. The contract, dated January 2004, represents approximately \$165,000 in matching funds.

4 Work Schedule

The proposed schedule is shown in the following page. The total project duration is estimated at 12 months (January 2006 through December 2006). Completion of the Final IRWMP is scheduled for mid-November 2006 in time for final adoption by participating agencies before the January 1, 2007 adoption deadline.

**Bay Area Integrated Regional Water Management Plan
Water and Wastewater Work Plan
WORK BUDGET**

Role Rate	Principal \$200	Project Manager \$160	Project Engineer \$130	Graphics \$110	Total Hours	Total Labor (\$)	ODCs (\$)	IRWMP Planning Grant Request	Agency Funding Match*	Total Budget
1 Project Coordination	114	188	170	120	592	\$88,180	\$16,200	\$104,380	\$0	\$104,380
1.1 Project Communication & Coordination	30	52	30		112	\$18,220	\$1,200	\$19,420		\$19,420
1.2 Project Controls	24	36			60	\$10,560		\$10,560		\$10,560
1.3 General Public Outreach	60	100	140	120	420	\$59,400	\$15,000	\$74,400		\$74,400
2 Complete Functional Area Documents	24	72	168	0	264	\$38,160	\$1,200	\$39,360	\$165,000	\$204,360
2.1 Update WS - WQ Document	12	36	84		132	\$19,080	\$600	\$19,680	\$165,000	\$184,680
2.2 Complete WW - RW Document	12	36	84		132	\$19,080	\$600	\$19,680		\$19,680
2.3 Complete SM - FP Document					0	\$0	\$0	\$0		\$0
2.4 Complete WM - HP&R Document					0	\$0	\$0	\$0		\$0
3 Integrate Functional Area Documents into IRWMP	124	446	948	156	1674	\$236,560	\$6,700	\$243,260	\$0	\$243,260
3.1 Develop Admin Draft IRWMP	108	398	860	108	1474	\$208,960	\$1,200	\$210,160	\$0	\$210,160
3.1.1 Regional Group	2	8	24	4	38	\$5,240		\$5,240		\$5,240
3.1.2 Region Description	6	40	80	24	150	\$20,640		\$20,640		\$20,640
3.1.3 Objectives	12	20	28	4	64	\$9,680	\$400	\$10,080		\$10,080
3.1.4 Water Management Strategies	6	18	40	8	72	\$10,160		\$10,160		\$10,160
3.1.5 Integration	28	80	120	16	244	\$35,760	\$400	\$36,160		\$36,160
3.1.6 Regional Priorities	6	20	40	4	70	\$10,040		\$10,040		\$10,040
3.1.7 Implementation	16	60	120	16	212	\$30,160	\$400	\$30,560		\$30,560
3.1.8 Impacts & Benefits	4	24	48	4	80	\$11,320		\$11,320		\$11,320
3.1.9 Technical Analysis & Plan Performance	4	16	48	4	72	\$10,040		\$10,040		\$10,040
3.1.10 Data Management	4	16	48	4	72	\$10,040		\$10,040		\$10,040
3.1.11 Financing	4	24	60	4	92	\$12,880		\$12,880		\$12,880
3.1.12 State-wide Priorities	4	16	48	4	72	\$10,040		\$10,040		\$10,040
3.1.13 Local Planning	4	16	48	4	72	\$10,040		\$10,040		\$10,040
3.1.14 Stakeholder Involvement	4	24	60	4	92	\$12,880		\$12,880		\$12,880
3.1.15 Coordination w/ State & Federal Agencies	4	16	48	4	72	\$10,040		\$10,040		\$10,040
3.2 Compile Public Draft IRWMP	12	36	60	36	144	\$19,920	\$500	\$20,420		\$20,420
3.3 Prepare Final IRWMP	4	12	28	12	56	\$7,680	\$5,000	\$12,680		\$12,680
TOTAL:	262	706	1286	276	2530	\$362,900	\$24,100	\$387,000	\$165,000	\$552,000

* Agency funding match provided by eleven Bay Area water agencies through a January 2004 contract with Contra Costa Water District and its consultant, RMC Water and Environment.

